Application of Lean Six Sigma to Acquisition

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Outline

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- Our “North Star”
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  - ACAT I-IV Systems Engineering Plans
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In the Beginning . . .

- Substantial Emphasis on LSS Training
  - 1000+ Project Sponsors; 5000 Yellow Belts; 802 GBs; 236 BBs; 21 MBBs
- "Bottoms-Up" Project Selection
  - Completed projects (Kaizen, RIE and DMAIC): 465
- Areas of Focus
  - Broad Exposure Within Workforce

Build Momentum Through Early, Local Successes

Our “North Star”

We are key enablers of NAVAIR’S leadership, management and workforce in the relentless pursuit of performance excellence through continuous process improvement and cultural transformation . . .

to better serve the sailor and marine.

AIR*Speed* Today (and Tomorrow)

- Emphasis on Strategic Alignment (Top-Down Project Selection)
- Master Black Belts Aligned to PEOs
- Program Performance Team Findings (Focus on EVM Data for SDD Programs)
- Flexible, Agile, Scaleable
- Win Over the Workforce by Fixing T

Focused on Enabling Program Success

Current Readiness Example F/A-18 Repeatable Release Holdback Bar

- Problem
  - A quality problem (build to print) at the vendor caused premature failures, posing a serious safety risk. Slow Turn Around Times (TATs) of repaired parts could jeopardize OPTEMPO.
- Approach
  - Worked with vendor/Navy personnel to analyze and fix root cause. Worked with Fleet Readiness Centers to shorten TAT of repaired parts.
- Results
  - Root cause corrected. TATs shortened by 50 days. No equipment or personnel lost.

Future Readiness Example ACAT I-IV Systems Engineering Plans

- Problem
  - SEP development, review and approval cycle time (693 days avg), quality and content of SEPs, and vague preparation guidance / review criteria.
- Approach
  - DFLSS project established a consistent and repeatable process that utilizes SE WIPT approach, automation tools that aid in co-authoring and collaboration, and a one-day signature summit. Extensive use of VoC.
- Results
  - Cycle time reduced to 45 days, and a 75% reduction in man-hours resulted in $16.5M TYPE II benefits across the FYDP at NAVAIR ($45M across

Additional LSS Examples

- T-64 Data Reduction Process (DRP) Improvement Project
- AV-8B “Ready For Tasking” Gap
- MH-60 Aircraft Delivery & Acceptance
- PMA-202: Three Kaizens in Nine Weeks
- Common Statement of Work (SOW) Tool
- We Just Got Under Contract – Why are We Already Over Cost and schedule? (from NAVAIR req’t def to 1st

Summary

- "Action Bias" – Speed and Agility are Key!
- Give High Priority to Those Activities that Enable Program Success
- Fix Their Problems (by Improving Their Processes)
- All Types of Benefits are Important!

Affect the Hearts and Minds of Our People

Get Projects Over the Goal Line

AIR*Speed* Points of Contact

- For Additional Information:
  - RDML William Shannon, Command Deployment Champion, (301) 757-6332
  - Robin Goebel, AIR*Speed* Chief of Staff, (301) 757-9970
  - Allen Heim, AIR*Speed* Training Coordinator, (301) 995-2965

Back-Ups

Lessons Learned / Growing Pains

- Executive Support
- Validation of Benefits
- Replication of Improvements
- Resource Management
- Speed!

Current Readiness Example T-64 Data Reduction Process (DRP)

- Problem
  - High failure rate (1st and 2nd pass yield) of T-64 engines across the depot test cell.
- Approach
  - Implement standardized process for structure and analysis of test cell data, including a rigorous trouble-shooting tool, to accurately identify root causes and improve yield rates.
- Results
  - Total annual man-hour savings estimated to be 6831 hours. Total annual cost savings with FPY of 75% and SPY of 100% estimated to be $1.8M (Type II).

Current Readiness Example
AV-8B "Ready For Tasking" Gap

- Problem
  - AV-8B Ready Basic Aircraft (RBA) condition below requirement.
- Approach
  - Clarify operational definitions of key metrics, and focus activities on understanding the true problem areas (In Reporting Status aircraft in addition to Out of Reporting Status aircraft).
- Results
  - Currently in Measure Phase, but there is already greater clarity regarding the problems that need to be addressed.

Current Readiness Example MH-60 Aircraft Delivery & Acceptance

- Problem
  - MH-60 aircraft delivery and acceptance cycle time (63 days avg), labor hours, redundant efforts, and rework.
- Approach
  - Joint project with Prime and DCMA to consolidate inspections, reduce flights, stagger deliveries, improve hangar flow, make waste visible, use kit carts, improve root cause analysis and corrective action process, and establish a standard post-DD-250 process.
- Results
  - 50% cycle time reduction. Type I benefits in excess of $25M across the FYDP

Current Readiness Example PMA-202: Three Kaizens in Nine Weeks

- Problem
  - Three acquisition headaches slowing program progress: Integrated Master Schedule, milestone review and approval process within the PMA, and the PMA's Acquisition Strategy Report approval process.
- Approach
  - Created a Program Manager's Guide with standard operating procedures for the three processes.
- Results
  - Less frustration, less impact due to turnover. The new documents, procedures and processes are in review for replication within other AIR 1.0